ABSTRACT OF THE DISCLOSURE

A video picture is encoded by adaptively switching between the operation of using a plurality of decoded video signals as reference frames and generating a predictive macroblock picture from a plurality of reference frames for each macroblock, the operation of extracting reference macroblocks from a plurality of reference frames and using the average value of the macroblocks as a predictive macroblock picture, and the operation of extracting reference macroblocks from a plurality of reference frames and generating a predictive macroblock picture by linear extrapolation or linear interpolation in accordance with the inter-frame distances between the reference frames and a to-be-encoded frame.